



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,960	07/22/2003	Brian N. Poindexter	702.266	6262

7590 04/08/2004
Devon A. Rolf
GARMIN INTERNATIONAL, INC.
1200 East 151st Street
Olathe, KS 66062

EXAMINER

LEE, WILSON

ART UNIT	PAPER NUMBER
----------	--------------

2821

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/624,960

Applicant(s)

POINDEXTER, BRIAN N.

Examiner

Wilson Lee

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Kates (5,430,641).

Regarding Claim 7, Kates discloses a circuit comprising:

- an oscillator (U2 shown in figure 4B) having a current source-sink connection (at C7) (See Col. 7, lines 64-67) (See Figures 4A and 4B);
- a switch (Q2) coupled to the current source-sink connection and configured to receive a synchronizing signal (See Col. 7, lines 56-57) having an active state (pulse is high shown in Figure 7) and inactive state (pulse = 0V shown in Figure 7), wherein the switch has an on state activated by the active state and deactivated by the inactive state; and
- a current path (constituted by R8 and Q5) coupled to the switch (Q2), wherein the current path is configured to pass a current when the on state is deactivated (e.g. when 0V applied to the gate of Q2, no current flow through Q2. Thus current will flow through Q5 to ground instead), and wherein the switch (Q2) is configured to pass the current when the on state (pulse is high) is activated (e.g. when voltage applied to the gate Q2, current will flow through Q2).

Regarding Claim 8, Kates discloses that the switch (Q2) is coupled to the current source-sink connection using a capacitor (C7) (See Figure 4A).

Regarding Claim 9, Kates discloses that the oscillator is included in a pulse width modulator (See Col. 5, lines 60-64).

Regarding Claim 10, Kates discloses that the circuit further comprises a self-oscillating, push-pull switching circuit (Q3 and Q4) coupled to the oscillator (See Figures 4A-C and Col. 7, lines 31-54).

Regarding Claim 11, Kates discloses that the self-oscillating, push-pull switching circuit is a Royer-class converter (See Figures 2, 4C and Col. 3, line 28. Q2 and Q3 of Figure 2 is the back-to-back that is the same as Q3 and Q4 in Figure 4C).

Regarding Claim 12, Kates discloses that a cold-cathode fluorescent lamp (CCFL) coupled to the self-oscillating, push-pull switching circuit (Q3 and Q4) (See Figure 4C).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Harrison (6,690,148) discloses a method and circuit for limiting a pumped voltage. Clayton et al. (6,583,994) discloses a method and apparatus for soft switched AC power distribution.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (571) 272-1824.

Art Unit: 2821

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956.

Papers related to Technology Center 2800 applications may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The official fax number is (703) 872-9306.

A handwritten signature in black ink, appearing to read "Wilson Lee", written over a horizontal line.

Wilson Lee
Primary Examiner
U.S. Patent & Trademark Office

4/5/04